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AUTHOR Willis, Joe D.; Layne, Benjamin H.  
TITLE Perceived Competitiveness, Skill, and Scores on the Sports Attitudes Inventory.  
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DESCRIPTORS \*Achievement Need; \*Athletes; \*Athletic Coaches; Competition; Failure; Females; Goal Orientation; High Schools; High School Students; Motivation; Performance Factors; Physical Education; \*Physical Fitness; \*Predictor Variables; Psychomotor Skills; Self Concept; \*Self Evaluation (Individuals); Student Evaluation  
IDENTIFIERS Sports Attitudes Inventory

## ABSTRACT

It was hypothesized that motivation (power, achievement, or fear of failure) scores would be important variables in predicting coaches' and students' ratings of competitiveness and skill. Female high school students in basketball, tennis, and track and field used a self-peer measurement technique to rate competitiveness and skill. Coaches' ratings of student competitiveness and skill were also obtained. For both criterion variables, coaches' skill rating was found to be the best predictor variable. Self-peer rating was an important predictor of self-peer competitiveness rating but was not a strong predictor of coaches' rating of competitiveness. Of the motive scales, power contributed most significantly to the prediction of both criterion variables. Fear of failure was a good predictor variable for coaches' ratings of competitiveness but was not a good predictor of self-peer rating. The achievement motive was not a good predictor of either criterion. These results are consistent with a previous study of male university athletes. Discrepancies were found in both studies between athletes' self perceptions and coaches' perceptions of competitiveness and skill. (FG)

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Perceived Competitiveness, Skill, and Scores on the  
Sports Attitudes Inventory

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Running Head: Perceived Competitiveness, Skill, and Competitive  
Motives

## Competitiveness

### Abstract

Designed as a validation study of a questionnaire measure of competitiveness, this study attempted to determine if power, fear of failure and achievement motive scores were predictors of coaches' ratings as well as self ratings of competitiveness.

Thirty-nine female subjects who were members of three athletic teams were administered Form B of the Sports Attitudes Inventory, which is a sport-specific instrument designed to measure three competition-related motives. Subjects rated themselves on competitiveness and skill using the self-peer measurement technique. Coaches' ratings of competitiveness and skill were also obtained. Coach's rating of competitiveness correlated .77 with coaches' skill rating, .62 with self-peer rating of competitiveness, .38 with power motive and .26 with fear of failure. Self-perception of competitiveness correlated .62 with coach's rating of competitiveness. Results of a stepwise regression analysis revealed that coach's skill rating was the most important predictor of coach's competitiveness rating (criterion variable). Other important predictor variables in the regression equation were the self-peer measure of competitiveness, power motive, and fear of failure. An additional regression analysis was performed using the self-peer measure of competitiveness as the criterion variable which found coach's rating of competitiveness and fear of failure to be the best predictors.

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Results indicated that major differences may exist in the ways in which athletes and coaches perceive competitiveness.

Results also lend support to the validation claims for the measures of power and fear of failure but do not appear warranted for the achievement motive scale.

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Perceived Competitiveness, Skill, and Scores on the  
Sports Attitudes Inventory

Competitive behavior is a subject which receives a great deal of attention on the part of those directly and indirectly involved with competitive sport. The perplexing riddle of talented athletes who never quite "make it" as well as not so talented athletes who excel is pondered by dilettantes and experts alike. Conventional wisdom generally concludes that some internal drive or characteristic of personality, often labeled "competitiveness", is the crucial factor which distinguishes the outstanding athlete from the ordinary athlete.

It would appear that with the importance attached to successful competitive behaviors, competitiveness would be a major focus of scientific investigation. This has not, however, been the case. Instead, there is a major void in the research literature in the area of competitive behavior. Berridge (1935) was among the first to study competitiveness. Berridge's technique utilized effort expended in a strength task as a measure of competitive temperament. This approach provided ineffective as a predictor of competitiveness. Booth (1958) developed a questionnaire consisting of 22 items selected from the MMPI which purportedly distinguished between good and poor competitors. Booth reported correlations of .63 and .65 between questionnaire scores and coaches' ratings of

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competitive spirit. Subsequent studies of football players (Kroll and Peterson, 1966) and wrestlers (Rasch, Hunt, and Robertson, 1961) failed to support the validity of the scale.

More recently, three scales designed to measure competitive motives were developed for use in research with athletes (Willis, 1982). A study of university athletes supported the validity of the scales as predictors of coaches' ratings of competitiveness (Willis, Layne, and Moffat, 1982).

The present study attempted to determine if motive scores for power, achievement and fear of failure were predictive of coaches' ratings and self ratings of competitiveness for high school female athletes. It was hypothesized that scores for these three competitive motives would be important variables in the prediction of coaches' ratings as well as self ratings of competitiveness. Support for the validity of the three scales would be evidenced by predicted findings.

### Method

Subjects were female high school students who were members of three varsity athletic teams. Sports represented were basketball, track and field and tennis. The three motive scales were administered in questionnaire form as Form B of the Sports Attitude Inventory. After completing the questionnaire, subjects rated themselves on competitiveness and skill using the self-peer

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ranking method (Holmes, 1971). These two ratings were presented independently with written and verbal explanations of the construct and instructions in the ranking procedure. The constructs were also explained to the head coaches who then rated each athlete on a scale of 1 to 7 on both dimensions. Ratings of skill and competitiveness by the coaches and athletes were conducted independently of each other.

## Results

Intercorrelations among the seven variables are shown in Table 1. Significant correlations were found between coaches ratings of competitiveness and scores on fear of failure and power motives as well as the self-peer ratings of skill and competitiveness. A positive correlation of .77 was found between coach's rating of competitiveness and skill rating. Self-peer rating of competitiveness was found to have a significant positive correlation with coach's rating of competitiveness and skill and also with power motive scores.

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Enter Table 1 about here

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Two step-wise regression analyses were performed which used coach's rating and self-peer rating of competitiveness as the criterion variables. Multiple correlations and beta weights are

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shown in Table 2. The multiple R for coaches' ratings of competitiveness was .86 which accounted for 73.6 percent of the variance. For self-peer ratings of competitiveness, the multiple R was .76. The amount of variance in self-peer ratings of competitiveness explained by the predictor variables was 57.9 percent...

~~Enter Table 2 about here~~

For both criterion variables, coach's skill rating was found to be the best predictor variable. Self-peer skill rating was an important predictor of self-peer competitiveness rating but was not a strong predictor of coach's rating of competitiveness. Of the motive scales, power contributed most significantly to the prediction of both criterion variables. Fear of failure was a good predictor variable for coach's ratings of competitiveness but was not a good predictor of self-peer rating. The achievement motive was not a good predictor of either criterion.

Discussion

Results of this study are consistent with a previous study of university athletes with respect to the nature of the relationship between coach's perception of competitiveness and skill (Willis, Layne, and Moffat, 1982). Coaches seem to relate the two constructs

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to a greater degree than athletes. Another interesting finding in terms of future investigation involves the discrepancies between athletes' self-perceptions and coaches' perceptions of competitiveness and skill. Although significant discrepancies were found in this study, even greater discrepancies were evident in the earlier study of university athletes. One might speculate that the greater the discrepancy between the coaches perceptions and the athlete's perceptions of important factors such as skill and competitiveness, the greater difficulty a coach would have in dealing with an athlete. Of the motives studied, power was found to be the best predictor of both measures of competitiveness. In the previous study, power was also the best predictor of coach's rating of competitiveness but fear of failure and achievement motivation were better predictors of self-peer rating. This difference could perhaps be due to the different levels of athletes studied. It is possible that basic motivational differences exist between high school and university level athletes. An alternative explanation may be that the present sample consisted entirely of females while the previous study was predominantly male. However, sex differences have been found only with respect to the achievement motive (Willis, 1982). A third possible explanation could lie in the nature of the sports involved. A mixture of individual and team sports were involved in the two studies. It has yet to

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be determined if motivational patterns are the same for all sports.

Since skill seems to be an important factor in competitiveness, it would be of interest in future studies to determine if additional skill variables would further improve the prediction of competitiveness. Of even greater interest would be the expansion of the psychological variables investigated. It would appear that the combination of performance and psychological variables has excellent potential for future investigations of competitive behavior.

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Table 1

Correlation Coefficients Among Ratings of Competitiveness,  
Skill, and Motive Scores

Variables	2.	3.	4.	5.	6.	7.
1. Self-Peer Ratings of Skill	.60**	.68**	.61**	.05	.23	-.08
2. Self-Peer Ratings of Competitiveness	.59**	.62**		.06	.49**	.05
3. Coaches' Ratings of Skill		.77**		.13	.17	-.12
4. Coaches' Ratings of Competitiveness				.26**	.38*	.01
5. Fear Motive					-.14	.12
6. Power Motive						.18
7. Achievement Motive						

\*  $p < .05$ \*\*  $p < .01$

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Table 2

Multiple Correlation Coefficients and Beta Weights  
for Coaches' Ratings of Self Ratings of Competitiveness

Criterion Variable	Multiple Correlation	R <sup>2</sup>	Beta Weights for Predictors			
			Coaches Skill Ratings	Self Skill Ratings	Self Power	Achieve
Coaches Ratings of Competi- tiveness	.86	.74	.621	.143	.286	.226
Self-Peer Rating of Competi- tiveness	.76	.58	.372	.302	.342	-.073